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(71) Applicant (for all designated States except US):
ELTHOM ENTERPRISES LIMITED [CY/CY];
Mitsis Building 1, 1st Floor, Office 4 Eleftherias Square,
P.O.Box 21294, 1505 Nicosia (CY).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GORBAN, Alexander** [UA/UA]; App.9, 26-b str Yaroslavov Val, 01034 Kiev (UA).

(74) Agents: **INTES, Didier** et al.; CABINET BEAU DE
LOMENIE, 158 Rue de l'Université, F-75340 PARIS
Cedex 07 (FR).

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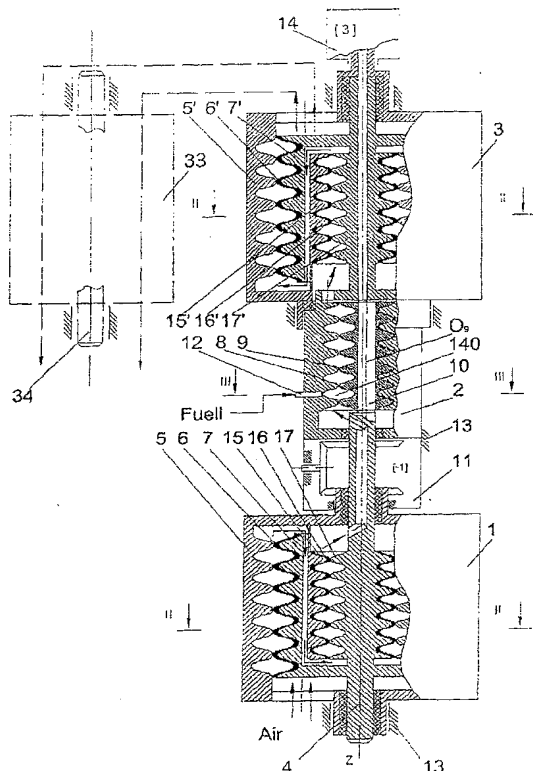
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(54) Title: METHOD OF TRANSFORMING ENERGY IN A ROTARY SCREW MACHINE OF VOLUMETRIC TYPE



(57) Abstract: A method of transforming energy in a rotary screw machine that comprises a first and a second set of conjugated male and female elements spaced apart from each other along a central axis and having inner/outer profiled surfaces. Upon rotary motion of the male and/or female elements, working chambers are formed between these elements. The working chambers perform an axial movement. The rotary motions of the different sets (1, 2, 3) are synchronized in such a manner that synchronous and inphase motion of the elements in the different sets is performed with different values of angular periods of oscillation of axial movement of the working chambers. Thereby, a working medium transported in these working chambers can be compressed or expanded.

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